

ABSTRACT OF THE DISCLOSURE

The multiple output DC/DC voltage converter is needed to generate voltages used in LCD. The multiple output DC/DC voltage converter generates a main supply voltage and at least two more auxiliary supply voltages. The main supply voltage is used as the data supply voltage which requires a significant amount of the power in the LCD and the auxiliary supply voltages are used as the gate on voltage and the gate off voltage. The data supply voltage is provided to the gray voltage generator and used in generating the gray voltage. The gate on voltage and the gate off voltage are provided to the gate driver. The multiple output DC/DC voltage converter comprises a transformer having a primary coil applied with the input DC voltage and at least two more secondary coils, a switch which repeatedly turns on or off responsive to the switching signal to change the current of the primary coil, a plurality of diodes connected to the each winding of the transformer and rectifying the voltage generated in the each coil and a plurality of capacitors connected to the each diode, charging the rectified voltage and generating constant voltage.